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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,803	06/12/2000	HERVE CROZIER	365-444P	3623

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EXAMINER

LEE, RIP A

ART UNIT	PAPER NUMBER
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1713

9

DATE MAILED: 05/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/530,803	CROZIER, HERVE	
	Examiner	Art Unit	
	Rip A. Lee	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8, 9 and 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u> | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

This office action follows a preliminary amendment filed on June 12, 2000. Claims 6-8 and 12 were amended to remove multiple dependency.

Claim Objections

1. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The species vinyl norbornane does not satisfy the description of the vinyl compound of claim 4, and therefore, recitation of this material fails to limit further the subject matter of claim 4.
2. Claim 6 is objected to because of the following informalities: The claim recites the phrase "propylene polymer copolymer." The term copolymer is an apparent typographical error. Appropriate correction is required.
3. Claims 8, 9, and 11 are objected to because of the following informalities: The preamble to all recited Markush groups should read "from the group consisting of." See MPEP 2173.05(h). Appropriate corrections are required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase “in particular” renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

6. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the limitation “nucleated propylene polymer.” There is insufficient antecedent basis for this limitation in the claim.

7. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the colors “yellow/orange,” “red/violet,” and “blue/green.” The meaning of the term “yellow/orange” as written is vague because it is not clear whether the claim is drawn to a yellow pigment and an orange pigment, or a single yellow-orange pigment. The relative degree of coloration is also vague for the term does not differentiate between a yellow-orange pigment and an orange-yellow pigment. Both aforementioned pigments technically would contain the requisite colors. A similar argument may be applied to the other terms.

8. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the limitation “nucleated polypropylene composition.” There is insufficient antecedent basis for this limitation in the claim.

9. Claims 12 and 13 provide for the use of a polymer composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 12 and 13 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,684,099 to Watanabe *et al.*

The prior art of Watanabe *et al.* relates to compositions comprising polypropylene polymer. The reference teaches the incorporation of nucleating agents to impart rigidity, heat resistance, and impact strength to the polymer (col. 9, lines 37-39). Preferred examples of nucleating agent include polyvinylcyclohexane and polyvinylcyclopentane (col. 9, lines 50-51) used in amounts of 0.05-0.5 % by weight (col. 9, line 55). According to the inventors, additives ordinarily employed in the field of art, such as a coloring agent, can be added to the composition (col. 10, line 41) in an amount of 0.01-1 % by weight (col. 10, line 63). Examples of coloring

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agent include carbon black, phthalocyanine, quinacridone, indolin, azo pigments, and titanium dioxide (col. 10, lines 54-56). Although no single embodiment that encompasses all the claims is shown in the examples of the reference, it would have been obvious to one having ordinary skill in the art to arrive at the claims of the present invention because such an embodiment is adequately provided in the generic disclosure of Watanabe *et al.*

The reference is silent with respect to the particular physicochemical properties recited in present claims 1, 3, 10, and 11. However, a reasonable basis exists to believe that the prior art compositions would exhibit the same properties, especially in view of the fact that the prior art recites essentially the same composition. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Watanabe *et al.* indicates that the compositions are injection molded or they are extruded using a pipe molding apparatus (col. 10, lines 22-25). Thus, it would have been obvious to one having ordinary skill in the art to do the same, since these techniques are taught in the reference.

Finally, regarding claim 13, intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See MPEP § 2111.02. There is no indication that the composition of the prior art can not be made into the claimed articles of manufacture. As such, the composition still meets the claims.

13. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,551,501 to Shiga *et al.* in view of 5,684,099 to Watanabe *et al.*

Shiga *et al.* discloses a polymer composition comprising a blend of crystalline polypropylene and 0.05-10,000 ppm by weight of a vinyl cycloalkane (claim 1). The inventors contemplate the use of additives normally incorporated into polypropylene, such as carbon black and pigments (col. 3, line 50). A specific amount of pigment is not disclosed in any example.

The prior art of Watanabe *et al.* also relates to compositions comprising polypropylene polymer nucleated with polyvinyl cycloalkanes. According to the inventors, additives ordinarily employed in the field of art, such as a coloring agent, can be added to the composition (col. 10, line 41) in an amount of 0.01-1 % by weight (col. 10, line 63). With respect to claims 1, 10 and 11, it would have been obvious to one having ordinary skill in the art to use the same amount of coloring agent in the composition of Shiga *et al.*, in order to produce a colored polypropylene composition.

Regarding claims 4, 5, 8, and 9, Shiga *et al.* teach the use of vinyl cycloalkanes selected from vinyl cyclopentane, vinyl cyclohexane, vinyl 2-methyl cyclohexane, and vinyl norbornane (claim 8), and Watanabe *et al.* disclose use of carbon black, phthalocyanine, quinacridone, indolin, azo pigments, and titanium dioxide as coloring agents (col. 10, lines 54-56). Thus, it would have been obvious to use these compounds because they are disclosed adequately in the prior art. In the example of Shiga *et al.*, the vinyl cyclohexane is polymerized first, followed by polymerization of propylene in the presence of vinyl cyclohexane polymer. Note that the prior art process is basically the same as that recited in present claim 6, resulting in the polymer blend

described in present claim 7. Watanabe *et al.* indicates that the compositions are injection molded or they are extruded using a pipe molding apparatus (col. 10, lines 22-25). Thus, it would have been obvious to one having ordinary skill in the art follow the same procedures, since these techniques are taught in the references.

The prior art is silent with respect to the particular physicochemical properties recited in the remaining claims. However, a reasonable basis exists to believe that the prior art compositions would exhibit the same properties, especially in view of the fact that the prior art recites essentially the same composition. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Finally, regarding claim 13, intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See MPEP § 2111.02. There is no indication that the composition of the prior art can not be made into the claimed articles of manufacture. As such, the composition still meets the claims.

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14. The prior art made of record but not relied upon is considered pertinent to the Applicant's disclosure. The following references relate to polypropylene compositions containing polyvinyl cycloalkane nucleating agents.

U.S. Patent No. 5,641,828 to Sadatoshi *et al.*

U.S. Patent No. 5,462,987 to Shinonaga *et al.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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May 8, 2002



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